Claims 1 and 4-13 are now presented for examination. Claim 4 has been cancelled without prejudice or disclaimer of subject matter. Claims 1, 12 and 13 have been amended to define still more clearly what Applicants regard as their invention, in terms which distinguish over the art of record. Claims 1, 12 and 13 are the only independent claims.

Claims 1 and 7 to 13 have been rejected under 35 U.S.C. § 103(a), as unpatentable over U.S. Patent No. 5,457,491 (Mowry '491) in combination with Japanese Patent No. 09-326943 (Ota) priority document of U.S. Patent No. 6,124,944 (Ohta '944), and U.S. Patent No. 6,225,974 (Marsden '974). Claims 5 and 6 have been rejected under 35 U.S.C. § 103(a), as unpatentable over the Mowry '491 patent, the JP '943 reference and the Marsden '974 patent, further in view of the Furakawa publication (Super High Definition Image Digitizing System). With regard to the claims as currently amended, these rejections are respectfully traversed.

Independent Claims 1, 12 and 13 as currently amended are directed to an image processing arrangement in which a profile corresponding to a kind of input device and a profile corresponding to a kind of output target film are held. Each profile includes color data according to plural gray patches. Input image data is inputted depending on the input device. The profile corresponding to the kind of input device and the profile corresponding to the kind of output target film are selected. Plural tables respectively corresponding to the plural color components of the input image data are generated based on the selected profile corresponding to the kind of input device and the selected profile corresponding to the kind of output target film. The color of the input image data is corrected using the generated table. The table is used to convert first color data into the selected profile corresponding to the kind of input device into second color

data corresponding to a gray patch that is same as the first color data in the selected profile corresponding to the kind of output target film.

In Applicants' view, Mowry '491 discloses a system for processing information in an image originated on a first medium into data representative of a modified image simulating an image originated on a selected second medium in which digital data is produced representative of the color component response of a selected second medium under a selected group of variables affecting the response of the second medium to subject colors. The digital data is stored in a memory for use in modifying digital data representative of color component values within the image originated on the first medium to simulate each corresponding component response within an image originated on the second medium. Data derived from the image originated on the first medium is correlated with the digital data representative of the color component response of the selected second medium and the information in the image originating on the first medium is selectively modified based on the digital data representative of the color component response of the selected second medium, thereby to simulate in the image originating on the first medium characteristics of the second medium.

According to the invention defined in Claims 1, 12 and 13 as currently amended, profiles include color data according to plural gray patches and plural tables respectively corresponding to the input image plural color components are generated based on the selected profile corresponding to the kind of input device and the selected profile corresponding to the kind of output target film. The table is used to convert first color data in the selected profile corresponding to the kind of input device into second color data corresponding the gray patch that is the same as the first color data in the selected profile corresponding to the kind of output

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target film. Advantageously, the look up table of each color component can easily be generated from gray patch data and the generated look up table can change the gradation characteristic of the input image data to the gradation characteristic of the output target film.

The feature of converting the first color data into second color data corresponding to the gray patch that is the same as the first color data in the selected profile corresponding to the kind of output target film is shown in the tables of Figs. 3, 4 and 6 and is disclosed in the corresponding portions of the specification. No new matter is believed to have been added.

Mowry '491, as disclosed at lines 17 through 37 of column 9, may teach generating a look-up table by "filming color charts and grey scale charts containing at least those gradients deemed registerable by broadcast NTSC television and charting the binary component-data results against video originated images, shot with the selected high definition camera unit of this system, of the same charts under the identical lighting conditions, a basis for translation is formed". The Mowry '491 disclosure, however, is devoid of any disclosure of profiles having color components according to plural gray patches and using generated tables to convert first color data in the first kind of input device selected profile into second color data corresponding to the gray patch that is the same as the first color data in the kind of target film selected profile as in Claims 1, 12 and 13. Accordingly, it is not seen that Mowry '491 in any manner suggests the feature of Claims 1, 12 and 13 of generating plural tables respectively corresponding to the plural color components of the input image based on the selected profile corresponding to the kind of input device and the selected profile corresponding to the kind of output target film and using the tables to convert first color data in the selected profile corresponding to the kind of input device into second color data corresponding to the gray patch that is the same as the first color data in

the selected profile corresponding to the kind of target film.

In Applicants' opinion, Ohta discloses an image processing arrangement in which information indicating whether or not a color is capable of being reproduced by an output device which is to output the entered image data is held by a three-dimensional LUT. Information indicative of a color incapable of being reproduced is held on at least the boundary surfaces of the LUT. By referring to the LUT, it is judged whether or not a color expressed by the entered image data is capable of being reproduced by the output device.

Ohta '944 may teach holding input profiles in an input profile store and output profiles in an output profile store. The Ohta '944 disclosure fails in any manner to suggest the feature of Claims 1, 12 and 13 of profiles that include color data according to plural gray patches and using a profile table to convert first color data in an input device profile into second color data corresponding to a gray patch that is the same as the first color data in the output target film. Accordingly, it is not seen that Ohta '944 in any manner suggests the features of Claims 1, 12, and 13. Since neither Mowry '491 nor Ohta '944 suggests anything of profiles having color data according to plural gray patches and using a profile table to convert first color data in an input device profile into second color data corresponding to a gray patch that is the same as the first color data in the output target film, it is not seen that the addition of Ohta '944 which only teaches the use of input and output profiles to Mowry '491's generating a look-up table by filming color charts and grey scale charts could possibly suggest the features of Claims 1, 12 and 13.

Marsden, in Applicants' view, discloses an arrangement for correcting gamut limitations of a color device in which a predefined color space is created for use in gamut correction due to the gamut limitations of the color device, such as a color printer, and a set of

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color data values is produced using the predefined color space. The set of color data values is for use in converting from a first color space (e.g., RGB) to a second color space (e.g., CMYK). Alternatively, a first color separation table, a predefined color space, a second color separation table for converting values of colors in the predefined color space to values in a colorant space, and a composite color separation lookup table by using a plurality of first values from the first color separation table are created. A plurality of second values from the second color separation table are used. The predefined color space is typically based upon a set of redefined chromaticities which are used in a transformation function.

It is a feature of Claims 1, 12 and 13 that profiles corresponding to a kind input device and a kind of output target film each include color data according to plural gray patches. In contrast, Marsden '974 discloses a gamut correction arrangement in which a first color separation table is created, where this table determines a conversion from a first set of color values to a first set of colorant values. A second color separation table is also created, which table determines a conversion from the first set of color values to a second set of colorant values. Then a final color separation lookup table is created by using the first set of colorant values and the second set of colorant values. A gamut surface generated using the original chromaticities is then used to determine what is in gamut and what is out of gamut. The two color separation tables are then combined such that points which lie in gamut use the values from the first color separation table while points which lie out of gamut use values from the second color separation table. It is not seen that Marsden '974' first, second and combined color separations tables and selection based on gamut boundary in any manner suggests profiles that include color data according to plural gray patches as in Claims 1, 12 and 13.

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Further, Marsden '974's first, second and combined separation tables are used to select colorant values with respect to what is in gamut and what is out of gamut. There is no suggestion in Marsden '974 of tables generated based on the selected profiles of the selected kind of input device and the selected kind of output target film and used to convert first color data in a selected kind of input device profile into second color data corresponding to a gray patch that is the same as the first color data in the selected kind of output target film profile. As a result, it is not seen that Marsden '974 relates in any manner to the feature of Claims 1, 12 and 13 of conversion of first color data of a selected input device profile into second color data of another profile according to a gray patch that is the same as the first color data. Accordingly, it is not seen that the addition of Marsden '974 devoid of any conversion in which the gray patch of second color data of a target profile is the same as the gray scale of first color data of an input device to Ohta '944 limited to the use of input and output profiles without any suggestion conversion where gray patch is the same to Mowry '491 generating a look-up table by filming color charts and gray scale charts could possibly suggest the features of Claims 1, 12 and 13. It is therefore believed that Claims 1, 12 and 13 are completely distinguished from any combination of Mowry '491, Ohta '944 and Marsden '974 and are allowable.

A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons.

Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicants' attorney, Christopher Philip Wrist, may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below listed address.

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